

Breakin' Down the Scientific Method

You are designing an experiment to see how fertilizer affects plant growth. You state: If more fertilizer is added to a plant, then it will grow taller. You setup 5 pots of the same size and plant one tomato plant in each. Each plant is exactly the same. Each plant is watered with 200mL tap water every other day. Each plant but one is given fertilizer every other day as well. For the first plant you do not use any fertilizer. For the second plant you use 10g of fertilizer. For the third plant you use 20g of fertilizer. For the fourth plant you use 30g of fertilizer. For the fifth plant you use 40g of fertilizer. Each day you measure the height of the tomato plant (in cm) using a meter stick. After 30 days of observation, you notice that the tomato plant that was given the most fertilizer is the tallest.

From the experiment above, identify the following:

Problem _____

Hypothesis _____

Materials (list) _____

Procedure _____

Operational Definition _____

Conclusion _____
